

The Hydrogen Fluoride. II. The Association  
in the Gas at High Pressures, by W.  
Spethhoff, E. U. Franck, 14 pp.

GERMAN, par, Zeitschrift für Elektro-  
chemie, Vol 61, No 8, 1957, pp 993-1000.  
SIA TT-65-10199

336,224

Sci  
Aug 67

Investigation of Intermolecular Interactions  
Through Hydrogen Bonds in Binary Mixtures,  
With Boiling Point Maxima (Vapor Pressure  
Minima) by Means of Raman Spectra, by G. -H.  
Schwab, G. Glatzer, 30 p.

GERMAN, per, Zeit fur Elektrochem 1957,  
Vol LXI, No 8, pp 1028-1048.

ATS-82L330

Sci  
Apr 60  
Vol III, No 2

113, 618

On Diffusion in Ag-Al Alloys, by  
Th. Heumann, et al, 9 pp.  
GERMAN, per, Zeitschrift fur Elektrochemie  
61, 1957, pp. 1138-1146.  
\*CFSTI TT 70-58078  
AVAILABLE FROM NBS ONLY

Sci/chem  
Apr 70

Significance of Pore Diffusion in the Reduction of  
Iron Ores, by L. Bogdandy, W. Janke.

GERMAN, per, Z fuer Elektrochemie, Vol LXI, No 9,  
1957, pp 1146-1153.

CRL/T. 879

Sci (r) 66  
Jun 63

Coating (Film) Processes on Zinc Anodes in  
Caustic Soda Solution, by R. Landsberg, 16 pp.  
GERMAN, per, Zeitschrift Fur Elektrochemie,  
No 9, 1957, pp 1162-1168.

ACSI J-4889

FSTC-HT-23-161-68

Sol/Chem  
Aug 68

361,335

Investigation of the Oxygen/<sup>18</sup>O on Noble  
Metal Electrodes. II. Smooth Iridium  
Electrodes, by M. Breiter, K. Hoffmann,  
C. A. Knorr, 15 pp.

GERMAN, per, Z fuer Elektrochemie, XXXXX  
Vol LXI, No 9, 1957, pp 1168-1176.

SLA 60-16281

Mar 62

The Inner Resistance of Potentiostatic Regulating C Circuits and Examples of the use of a Potentiostat, by M. Breiter, F. G. Will  
GERMAN, per, Z. Elektrochem, Vol 61, 1957,  
pp 1177-1183.  
AEC ORNL-tr-574

Sci/Electronics  
Nov 66

314,309

Measurements of the Impedance of the Phase Boundary  
Between Germanium and Electrolyte, by K. Bohnenkamp,  
H. J. Engell, 45 pp.

GERMAN, per, Z Elektrochemie, Vol LXI, No 9,  
1957, pp 1184-1196.

SLA 59-10962

Sci - Chem  
Sep 59  
Vol 2, No 1

97,279



A Measuring Method for the Determination  
of Thermal Conductivity at 1100C.  
by K1. Schafer, F. W. Reiterm. ✓  
GERMAN, per, Zeit fur Elektrochemie,  
Vol LXI, No 9, 1957, pp 1230-21235.  
SLA TT 64-30306

Sci

May 67

3227,228

61-10523

Jander, Gerhart and Wels, Josef.  
MOLTEN ANTIMONY TRIBROMIDE AS AN IONI-  
ZING SOLVENT AND THE BEHAVIOR THEREIN OF  
DISSOLVED SUBSTANCES. I (Geschmolzenes Antimon  
(III)-bromide als Ionisierendes Lösungsmittel und das  
Verhalten Darin Gelöster Substanzen. I). [1960] [20]p.  
21 refs.

Order from SI A m \$2.40, ph \$3.00 61-10523

Trans. of Zeitschrift für Elektrochem[ie] (West  
Germany) 1957, v. 61 [no. 10] p. 1275-1283.

It is shown that molten antimony tribromide, as re-  
gards its properties as a solvent, belongs in the series  
of the ionizing "water-like" solvents. (Author)

(Chemistry--Physical, TT, v. 5, no. 7)

1. Antimony bromides--  
Solvent properties
2. Title: Molten salts
1. Jander, G.
- II. Wels, J.

148,528

Office of Technical Services

A Contribution to the Interpretation of the  
Passivity of Iron, in Particular, of the Flade  
Reference Potential, by H. Gahr, E. Lange, 22 p.

GERMAN, per, Zeit Elektrochem, 1957, Vol LXI,  
No 10, pp 1291-1301.

ATS-241334

ATS 628-6J

Sci  
Apr 60  
Vol III, No 2

111,673

Measurement of Transport Coefficients During  
Electrolysis of Ag-halide Crystals, by  
S. Memmenoh.  
GERMAN, per, Zeit. Elektrochem., No 54, 1958,  
pp 433-436.  
\*NBS TT 70-59095  
Available NBS Only

Sci/Chem  
Sept 70

Recent Findings Concerning the Electro-Chemistry of  
Nonaqueous Solutions: Conductances and Standard  
Potentials, by L. Fischer, G. Winkler, G. Jander,  
100 p.

GERMAN, per, Zeit fur Elektrochemie, 1958,  
Vol LXII, No 1, pp 1-28.

SLA 59-17801

Sci  
Feb 60  
Vol 2, No 9

107049

On the Condensation and Evaporation of Zinc Sulphide  
and Cadmium Sulphide in a High Vacuum, by A. Neuhaus,  
W. Retting, 27 p.

GERMAN, per, Zeit fur Elektrochemie, 1958, Vol LXII,  
No 1, pp 33-40.

SLA 59-20373

Sci  
Mar 60  
Vol 3, No 1

110,886

The Chemical Reactions in Manganese Dioxide Electrodes,  
by K. Neuman, W. Fink.

GERMAN, per, Z. fuer Elektrochemie, Vol LXII, No 2,  
1958, pp 114-122.

BAE 856

Sci - Chem

Jan 61

137,366

Concerning the Mechanism of Supersensitization  
of Photographic Emulsions. A Contribution to  
the Problem of Energy Transfer, I and II., 57 pp.

GERMAN, per, Zeitschrift fuer Elektrochemie,  
Vol LXII, No 2, 1958, pp 132-152.

SLA 59-15695

Sci  
Dec 59  
Vol 2, No 4

103, 107



The Influence of the Substituents R in  
Compounds MeH on the Electron Acceptor  
Strength of the Metal Me, by W. Strohmeier,  
Z. Eitsel, 7 pp.

<sup>rev,</sup>  
GIESSEN, Z Elektrochem, Vol LXII, No 2, 1958,  
pp 188-191.

Assoc Tech Sr  
880260

Sci - Chem  
Apr 59  
OCS, V. I, No 5

86,177

The Rate of Oxidation (Corrosion) of Titanium  
in Molten Salts and the Composition of the  
Oxidation Products, by M. E. Straumanis, Ch.  
Chiou,

GERMAN, per, Z. Elektrochem, Vol LXII, No 2,  
1958, pp 201-209.

ATS 506-GJ

Sci - Chem

Aug 60

123,934

The Mechanism of Ionization of Molecular Chlorine on  
a Platinum Electrode, by A. Frumkin, G. Tedoradse.  
GERMAN, per, Z fuer Elektrochemie, Vol LXII, 1958,  
pp 251-256.  
NASA TT F-9172

Sci-Phys  
Jan 65

U.S. GOVERNMENT ONLY

270,905

The Mechanism of Electrolytic Deposition and Dissolution of Solid Metals. II. Galvanostatic Processes on Silver Electrodes and the Kinetics of Crystal Growth, by H. Gerischer, GERMAN, per, Z fuer Elektrochemie, Vol LXII, 1958, pp 256-264.  
NASA TT F-9190

Sci-M7M

Feb 65

U.S. GOVERNMENT ONLY

~~EX~~ 274,612

On the Mechanism of the Electrolytic  
Deposition and Solution of Solid Metals,  
II. Galvanostatic Transient Processes at  
Silver Electrodes and the Kinetics of  
Crystal Growth, by Heinz Gerischer, 18pp.  
GERMAN, per, Zeitschrift fur Elektrochem,  
Vol 62, No 3, 1958, pp 256-264.  
CFSTI TT-64-18599.

322,351

Sci - Chemistry  
Mar 67

The Relations Between the Anomalous Freezing  
Point Depression and the Mechanical-Elastic  
Behavior of Gels, by W. Kuhn, E. Peterli,  
H. Majer, 12 pp.

GERMAN, per, Z. für Elektrochemie,  
Vol LXII, ~~xxxx~~ No 3, 1958, pp 296-300.

SLA 60-16799

Sci  
Vol IV, No 7  
May 62

193, 687

Liquid Anion Exchangers, by U. Schindewolf, 15 pp.

GERMAN, per, Z fuer Elektrochem, Vol LXII, 1958,  
pp 335-340.

AEC-EP Tr-254

Sci - Chem  
Sep 59

96,715-

On Selective Solvation of Ions in Solvent  
Mixtures, by H. Strehlow, H. -M Koepf.  
GERMAN, per, Zeitschrift fuer Elektrochemie,  
Vol 62, No 3, 1958, pp 373-378.  
SIA TT-66-10351

Sci-Chem  
Sept 66

310,378



Potentiometry on Silver Halide Single Crystals;  
Contribution to the Mechanism of Photographic  
Development, by R. Matzjec, 11 pp.

GERMAN, per, Z Elektrochemie, Vol LXII, No 4,  
1958, pp 400-404.

SLA 59-15031

Sci - Chem  
Sep 59  
Vol 2, No 1

97,430

Form of Developed Silver (A Contribution to the  
Elucidation of the Mechanism of Photographic  
Development, by E. Klein, 32 pp.

GERMAN, per, Zeit fuer Elektrochemie, Vol LXII,  
No 5, 1958, pp 505-519

SLA 59-15032

Sci - Physics

Sep 59

Vol II, No 2

98,635

Relationship Between Raman Scattering, Absorption and  
Fluorescence (Resonance Raman Effect, by J. Behringer,  
2

GERMAN, per, Z. Elektrochem, Vol LXII, No 5, 1958,  
pp 544-567.

ATS 429-CJ

Sri - Chem

Aug 60

123,343

The Effect of Hydrogen Ion Concentration  
on the Electrochemical Behavior of Active  
Iron in Acid Solutions, The Mechanism of  
the Reaction  $\text{Fe} \rightleftharpoons \text{Fe}^{++} + 2e$ , by K. E. Heusler  
10 pp.

GERMAN, per, Z fuer Elektrochemie,  
Vol LXII, No 5, 1958, pp 582-587.

ATB-70M410

Sci  
Vol IV, No 7  
Apr 62

192,664

Experimental Results on Passive Iron, by K. G. Weil.

GERMAN, per, Z fuer Electrochemie, Vol LXII,  
No 6/7, 1958, pp 638-641.

ATS 7178415  
ATS 630-GJ

Sci - Chem

Jun 61

156,541

Thickness and Structure of Passivating Oxide  
Layers on Iron, by K. J. Vetter.

GERMAN, per, Z fuer Electrochemie, Vol LXII,  
No 6/7, 1958, pp 642-648.

ATS 636-GJ

Sci - Chem

Jun 61

156,540

Franck, U. F.  
INSTABILITY PHENOMENA IN METALS THAT CAN  
BECOME PASSIVE. [1962] 12p.  
Order from ATS \$13.75      ATS-00P60G

Trans. of Zeitschrift für Elektrochemie (West  
Germany) 1958, v. 62, no. 6/7, p. 649-655.

DESCRIPTORS: \*Metals, \*Passivity, Electrochemistry

(Chemistry--Physical, TT, v. 8, no. 4)

62-17697

I. Franck, U. F.  
II. ATS-00P60G  
III. Associated Technical  
Services, Inc.,  
East Orange, N. J.

ATS/979-GJ

Office of Technical Services

Investigation of the Passivity of Metals Through  
Measurements of the Electrode Impedance at High  
Frequencies, by B. N. Kabanov, D. I. Leikis, 6 p.

GERMAN, per, Zeit Elektrochem, 1958, Vol LXII,  
No 6/7, pp 660-663.

ATS-22L330

Sci  
Mar 60  
Vol 2, No 11

109,551



The Structure of the Passive Film on Chromium  
Steels, by M. Prazak, V. Prazak, Vl. Cihal,  
10 p.

GERMAN, per, Zeit Elektrochem, 1958, Vol LXII,  
No 6/7, pp 739-745.

ATS-26L330

ATS-494-65

Sci  
Mar 60  
Vol 2, No 11

109, 558

The Passivation of Chromium in Dilute Sulfuric  
Acid, by Th. Heumann, F. W. Diekötter, 7 p.

GERMAN, per, Zeit Elektrochem, 1958, Vol LXII,  
No 6/7, pp 745-750.

ATB-25L330

Sci  
Mar 60  
Vol 2, No 11

109,550

The Passivity of Nickel, by K. Schwabe, G. Dietz,  
13 p.

GERMAN, per, Zeit Elektrochem, 1958, Vol LXII,  
No 6/7, pp 751-759.

ATS-23L33G

Sci  
Mar 60  
Vol 2, No 11

109,560

Anodic Passivation and Depassivation of Lead in  
Sulphuric Acid, by W. Feitknecht. UICL

GERMAN, per, Z Elektrochem, Vol LXII, No 6/7,  
1958, pp 795-803.

RAE 841

Sci - Chem  
Mar 60

111,867

Theory of the Resonance Raman Effect, by J.  
Behringer,

GERMAN, per, Z Elektroche, Vol LXII, No 8, 1958,  
pp 906-914.

ATS 430-GJ

Sci - Chem

Aug 60

123,344

61-10525

Jander, G and Fischer, L.  
ZINC DIETHYL AS A SOLVENT. II. CONDUCTIVITY  
INVESTIGATIONS (Über Zinkdiäthyl als Lösungsmittel.  
II. Leitfähigkeitsuntersuchungen). [1960] [15]p.  
15 refs.  
Order from SLA ml\$2.40, ph\$3.30 61-10525

Trans. of Zeitschrift für Elektrochemie (West  
Germany) 1958, v. 62, p. 971-977.

The conductivity behavior of n-Bu<sub>4</sub>Ni, Li ethyl, ZnI  
ethyl and AlBr<sub>3</sub> in Zn diethyl solutions was studied in  
relation to concentration at 20°C. The course of reac-  
tions of ZnI ethyl and AlBr<sub>3</sub> with Li ethyl or AlBr<sub>3</sub> with  
ZnI ethyl was studied conductometrically. The results  
corroborate the conclusions drawn in report No. 1. An  
evaluation based on material available to date would  
assign to Zn diethyl a kind of middle position, corre-  
sponding to its solvent properties, between the ionizing  
solvents on the one hand and the inert organic solvents  
on the other. (Author)

(Chemistry--Physical, TT, v. 5, no. 7)

1. Zinc compounds (Organic)--  
Solvent properties
2. Zinc compounds (Organic)--  
Conductivity
1. Jander, G.
- II. Fischer, L.
- III. Title: Conductivity...

148,547

Office of Technical Services

Contribution to the Theory of Alternating Current  
Polarography, by Hiroaki Matsuda, 40 pp.

GERMAN, per, Zeitschrift fuer Elektrochemie,  
Vol LXII, 1958, pp 977-989. (9208279)

AEC-UCEL-Tr-932

Sci - Phys

Jun 63

234,305

Klein, E.  
THE RELATIONS BETWEEN THE BLACKENING AND  
THE SIZE OF THE DEVELOPED UNITS OF SILVER.  
[1961] [22]p. 9 refs.  
Order from SLA \$2.60

62-14093

Trans. of Zeitschrift für Elektrochemie (West  
Germany) 1958, v. 62, no. 9, p. 993-999.

DESCRIPTORS: \*Colors, \*Silver, Measurement,  
\*Electron microscopy, Chemical analysis, Colloids,  
\*Photographic emulsions, Particle size.

(Materials--Photographic, TT, v. 10, no. 11)

62-14093

I. Klein, E.

Office of Technical Services



Separation and the Critical Point in Solid and  
Liquid Mixtures, by A. Münster, K. Sagel, 21 pp.

GERMAN, per, Zeit Elektrochemie, Vol LXII, No 10,  
1958, pp 1075-1082. 9207230

AEC/NP Tr-977

Sci - Phys

May 63

232,214

Measurement of Diffusion in Crystals by Isotope  
Exchange with Gases, by R. Haul, D. Just, 11 p.

GERMAN, per, Zeit Elektrochemie, 1958, Vol LXII,  
No 10, pp 1124-1130.

ATB-07L330

Sci  
Feb 60  
Vol 2, No 12

108,248

Effect of Small Amounts of Oxygen on the  
Behavior of Metal Electrodes, by R. Ch. Burstein.  
GERMAN, per, Zeitschrift Fur Elektrochemie,  
Vol 62, No 47, 1958, pp 655-660.  
HB 6490

EE-Ger  
Sci/M&M  
May 65

280,701

61-10635

Briegleb, G. and Czokalla, J.  
THE DETERMINATION OF IONIZATION ENERGIES  
FROM THE SPECTRA OF ELECTRON TRANSITION  
COMPLEXES (Die Bestimmung von Ionisierung-  
senergien aus den Spektren von Elektronenübergangs-  
komplexen). [1960] [18]p. 86 refs.  
Order from SLA ml\$2.40, ph\$3.30 61-10635

Trans. of Z. [eitschrift für] Electrochem[ie] (West  
Germany) 1959, v. 63 [no. 1] p. 6-12.

The ionization energy of molecules which have elec-  
tron donor properties is determinable from the energy  
 $h\nu$  of an intermolecular electron band, for example  
with trinitro benzene, chloranil, or iodine as acceptor.  
This method is applied for the calculation of the ion-  
ization energy of condensed aromatic hydrocarbons,  
diphenylpolyenes, N-substituted anilines and other  
aromatic amines. It is particularly applicable in  
cases where the hitherto known experimental proce-  
dures are not suitable. (Author)  
(Chemistry-Physical, TT, v. 5, no. 9)

1. Organic compounds--  
Ionization
2. Molecules--Electron  
transitions
1. Briegleb, G.
- II. Czokalla, J.

151801

Office of Technical Services

62-10363

Feltknecht, W.

ON THE OXIDATION OF SOLID HYDROXY COM-  
POUNDS OF IRON IN AQUEOUS SOLUTIONS.

[1961] 19p. (16 figs. omitted) 45 refs.

Order from SLA \$1.60

62-10363

I. Feltknecht, W.

Trans. of Z[eitschrift fur] Elektrochem[ie] (West  
Germany). 1959, v. 63 [no. 1] p. 31-43.DESCRIPTORS: \*Iron compounds, \*Hydroxides,  
Solids, \*Oxidation, Solutions, Mixtures, X-rays,  
Electron microscopy, Magnetite, Crystals.

The oxidation of  $\text{Fe}(\text{OH})_2$  by  $\text{O}_2$  or  $\text{O}_2/\text{N}_2$  mixtures  
in both strong and weak alkaline solutions in the  
presence of  $\text{Cl}^-$  and  $\text{SO}_4^{--}$  ions has been investigated  
by using X-rays and electron microscopy. On very  
rapid oxidation  $\delta$   $\text{FeOOH}$  (formerly designated  $\delta$   
 $\text{Fe}_2\text{O}_3$ ) is formed topochemically. In 1 N NaOH at  
70°C,  $\delta$   $\text{FeOOH}$  is converted into  $\alpha$   $\text{FeOOH}$  through-  
(Chemistry--Physical, TT, v. 7, no. 9) (over)

Office of Technical Services

The Mechanism of the Decomposition of Wustite  
 $\text{Fe}_{1-x}\text{O}$  Below  $570^\circ\text{C}$ , by A. Hoffmann.

GERMAN, per, Z fuer Elektrochemie, Vol LXIII,  
No 2, 1959, pp 207-213.

BISI 2766

Sci - Chem

204,770

Jul 62

list 139

On the Relation Between Deposition Conditions and  
Growth Form in Electrocrystallization of Copper, by  
H. Seiter, H. Fischer, 28 pp.

GERMAN, per, Z. für Elektrochem, Vol LXIII, No 2,  
1959, pp 249-257.

SLA 60-16810

Sci

Apr 62

191, 343

Vol IV, No 6

Relationship Between Precipitation Conditions and  
Form of Growth During Electrocrystallisation of  
Copper, by H. Seiter, H. Fischer.

GERMAN, per, Z. Elektrochem., Vol 63, No 2, 1959  
pp 249-257.

CRL/D.669

sci/ chem  
aug 69

389,662



The Nature of the Passive Layers on Thin Nickel  
Films, by H. Pfisterer, A. Politycki, E.  
Fuchs, 7 pp.

GERMAN, per, Z fuer Elektrochemie,  
Vol LXIII, No 2, 1959, pp 257-261.

MS-7341G

ATS/921-GJ

Sci

Vol IV, No 7

Apr 62

193,846

The Electrical Conductivity of Oxides, by W.  
Noddack, H. Walch, 19 pp.

GERMAN, per, Z Electrochem, Vol LXIII, 1959,  
pp 269-274.

ABC Tr-4369

Sci - Chem  
Apr 61

149,555

CEA-tr-A-715 (Rpt: UNCLASSIFIED)  
ETUDE DES PROPRIÉTÉS ÉCHANGEUSES  
D'IONS DES COMPOSÉS MINÉRAUX DE  
L'ÉTAIN ET DU ZIRCONIUM À L'AIDE DES  
ISOTOPES TRACEURS. (Study of the Ion  
Exchange Properties of Mineral Compounds of  
Tin and Zirconium Using Isotope Tracers).  
E. Merz. Translated into French from Z. Elek-  
trochem. 63, 288-92(1959). 16p. 12/15/60.  
Nonproject.

NSA

C

*German*

Wittig, Franz Eberhardt.  
ON THE SYSTEMATOLOGY OF THE HEATS OF  
MIXING OF THE B-METALS. Rept no. 9 on the  
Contributions to the Energetics of Metallic Systems.  
[1963].

Order from FRI

FRI Trans-181

SLA 63-17870

Trans. of Zeitschrift für Elektrochemie (West Germany)  
1959, v. 63, no. 2, p. 327-341.

DESCRIPTORS: \*Metals, \*Metallic crystals, \*Electro-  
chemistry, Heat transfer, Energy, Mixtures.

(Metallurgy, TT, v. 10, no. 8)

63-17870

62-17867

- I. Title: B metals
- I. Wittig, F. E.
- II. Title: Contributions ...
- III. FRI Trans-181
- IV. Fulmer Research Inst.,  
Ltd. (Gt. Brit.)

Office of Technical Services

The Behavior of High Polymers Towards Direct  
Current, by H. U. Hervig, E. Jenckel, 23 p.

GERMAN, per, Zeit Elektrochem, 1959, Vol LXIII,  
No 3, pp 360-373.

ATB-421330

Sci  
Mar 60  
Vol 2, No 11

109,549

The Effect of Stearic Acid Coatings on the Volta  
Potential of Gold, by G. Radlein, H M. Honrath.  
UNCLASSIFIED

GERMAN, per, Z fuer Elektrochemie, Vol LXIII, No 3,  
1959, pp 397-399. 9676927

Navy 2604/NRL 2 802

Sci - Chem  
Aug 60

122,430

61-12985

Will, F. G.  
THE DYNAMIC CHARACTERISTICS OF POTENTIAL-  
STATIC REGULATOR CIRCUITS. [1961] 17p.  
Order from ATS \$19.95      ATS-01N49G

Trans. of Zeitschrift für Elektrochem[ie] (West  
Germany) 1959, v. 63, no. 4, p. 484-491.

1. Electrochemistry--  
Instrumentation
2. Potentiometers--Circuits
3. Title: Potentiostatic  
regulators

- I. Will, F. G.
- II. ATS-01N49G
- III. Associated Technical  
Service, Inc., East  
Orange, N. J.

158894

Office of Technical Services

(Chemistry--Physical, TT, v. 5, no. 10)

State of Association of Dissolved Organo-  
Metallic Compounds of the II., III. and  
IV. groups of the Periodic System of the  
Elements, by Walter Strohmayer, Karlheinz  
Humpfer, Karlheinz Miltenberger, F.  
Seifert, 6 pp.  
GERMAN, per, Zeitschrift für Elektrochemie,  
Vol 63, No 4, 1959, pp 537-539.  
SLA TT-64-30941

336,225

Sci  
Aug 67



The Effect of Medium-Fast Electrons on Some Metal  
Oxides, by C. V. Koch, O. Glanzer.  
GERMAN, per, 2, ~~Int~~ Electrochemie, Vol LXIII, No 3,  
1959, pp 557-563.  
•AEC

Sci-Phys  
Jan 65

The Electrolytic Conductivity of  
Dissolved Organometallic Compounds as  
A Function of the Electron Acceptor  
Strength of the Metal and the Electron  
Donor Strength and Dielectric Constant  
of the Solvent, by Walter Strohmaier,  
Friedrich Seifert, 10 pp.

GERMAN, per, Zeitschrift für Elektrochemie,  
Vol 63, No 6, 1959, pp 683-688.  
SLA TT-64-30985

Aug 67  
Sci

336,226

Observations on the Effect of Surface Diffusion in  
the Growth of Potassium Crystals From Super-  
Saturated Vapour, by W. Dittmar, & K. Neumann,

GERMAN, per, Z Elektrochemie, Vol LXIII, 1959,  
pp 737-741.

RAE 977

Sci - Chem

200, 902

Jun 62

Decarburization and Denitriding of Iron-Silicon  
Alloys, by J. D. Fast,

GERMAN, per, Z Elektrochemie, Vol LXIII, No 7,  
1959, pp 765-772.

BISI 2844

Sci - M/M  
Aug 63

342,159

Title Unknown, by W. Schottky.  
GERMAN, per, Zeit fur Elektrochemie,  
Vol LXIII, 1959, pp 784-788.  
\*AEC Tr 2337

Sci-Elect /Misc  
Feb 66

*Check AEC  
Before Releasing*

Redox Processes on Germanium Electrodes, by F. Beck,  
H. GERISCHER.  
GERMAN, per, Z. fuer Elektrochemie, Vol LXIII,  
1959, pp 943-950.

Language Sv Bu  
514 60-16230

Sci - Chem

62-10119

Oct 60

11/84/1655/29,639

63-12926

Cordes, H. and Rotger, H.

A CONTRIBUTION TO THE ELECTRICAL CONDUCTIVITY MECHANISM OF MELTS OF METALLO-ORGANIC COMPLEX COMPOUNDS AND THEIR SOLUTIONS WITH ASSOCIATING SOLVENTS. [1962] 19p.  
Order from K-H \$23.75 K-H 9820

Trans. of Zeit[schrift] für Elektrochemie (West Germany) 1959, v. 63, p. 1030-1037.

DESCRIPTORS: \*Electrical conductance, Melting,  
\*Metalorganic compounds, Solutions, Solvents, Complex compounds.

(Chemistry--Physical, TT, v. 9, no. 10)

- I. Cordes, H.
- II. Rotger, H.
- III. K-H-9820
- IV. Kresge-Hooker Science  
Library Associates,  
Detroit, Mich.

Office of Technical Services

Hertz, H. G. and Spalkhoff, W.  
ON THE CHEMICAL SHIFT OF THE PROTON RES-  
ONANCES OF WATER IN ELECTROLYTE SOLU-  
TIONS, [1963, 55]p. 48 refs.  
Order from SLA \$5.60

63-18091

Trans. of Zeitschrift für Elektrochemie (West  
Germany) 1959, v. 63, no. 9/10, p. 1096-1110.

DESCRIPTORS: \*Electrolytes, Solutions, Water,  
\*Chemical bonds, \*Protons, \*Nuclear resonance,  
\*Resonance absorption.

The inclusion of a molecule in a hydrogen bridge bond  
entails a reduction of the screening of the proton  
located in the polar group. This rule is corroborated  
by a compilation of the data for systems containing  
hydrogen bridge bonds obtained by the NMR-method.  
It is of interest to determine whether this rule is also  
(Chemistry--Physical, TT, v. 10, no. 8) (over)

63-18091

I. Hertz, H. G.  
II. Spalkhoff, W.

Office of Technical Services



Karagounis, G. and Peter, O.  
THE INFRARED SPECTRA OF ORGANIC COM-  
POUNDS SPREAD IN THIN LAYERS ON SURFACES  
OF IONIC LATTICES, PT. 3. [1961] 18p.  
Order from ATS \$26.45      ATS-06NS0G

Trans. of Zeitschrift für Elektrochemie (West  
Germany) 1959, v. 63, no. 9/10, p. 1120-1133.

DESCRIPTORS: \*Infrared spectroscopy, \*Organic  
compounds, \*Thin films, Lattices, Ions

(Chemistry--Physical, TT, v. 6, no. 3)

61-22652

- I. Karagounis, G.
- II. Peter, O.
- III. ATS-06NS0G
- IV. Associated Technical  
Services, Inc., East  
Orange, N. J.

ATS/949-GJ

175845

Office of Technical Services

The Measurement of Rapid Reactions in Solution  
Using the Rotating Disk Electrode, by W.  
Vielstich, D. Jahn, 4 pp.

GERMAN, per, Z fuer Elektrochemie, Vol LXIV,  
No 1, 1960, pp 43-44.

SLA 60-18794

202,243

Sci

Jun 62

TT-65-13810

Field 7D

Berg, H.; Kapalla, H.

VELOCITY DETERMINATION OF FAST REACTIONS IN  
SOLUTION FROM DIFFUSION CURRENT-TIME FUNC-  
TIONS OF THE DROPPING MERCURY ELECTRODE.

5p. 6 refs.

Order from SLA: \$1.10 as TT-65-13810

Trans. of Zeitschrift fuer Elektrochemie (West Germany)  
v64 n1 p44-5 1960.

MR 666

62-17176

Vetter, K. J. and Arnold, K.  
CORROSION AND OXYGEN OVERPOTENTIAL OF  
PASSIVE NICKEL IN SULFURIC ACID. [1962] 13p.  
Order from ATS \$18.90      ATS-01P60G

Trans. of Zeitschrift für Elektrochem[ie] (West  
Germany) 1960, v. 64, p. 244-251.

DESCRIPTORS: \*Corrosion, \*Oxygen, \*Electric  
potential, \*Nickel, Passivity, Sulfuric acid,  
Electrochemistry.

(Chemistry--Physical, TT, v. 8, no. 3)

I. Vetter, K. J.  
II. Arnold, K.  
III. ATS-01P60G  
IV. Associated Technical  
Services, Inc., East  
Orange, N. J.

Office of Technical Services

Investigation of Formation and Removal of  
Hydrogen and Oxygen Depositions on Platinum  
by a New Nonstationary Method, by  
F. G. Will, C. A. Knorr.  
GERMAN, per, Z fuer Elektrochemie, Vol LXIV,  
1960, pp 258-269.  
NASA TT F-9849

Sci-Chem

Apr 65

U.S. GOVERNMENT ONLY

278,1434

Investigation of Adsorption Phenomena in  
Rhodium, Iridium, Palladium and Gold Using  
the Potentiostatic Delta Method, by  
F. G. Will, C. A. Harr.  
GERMAN, per, Z für Elektrochemie, Vol LXIV,  
1960, pp 270-275.  
NASA TT F-3250

Sci-Chem

Apr 65

U.S. GOVERNMENT ONLY

270,133

Analysis of Long Period Interference in the Case  
of Synthetic Fibres, by R. Bonart, R. ~~SAXX~~Hosemann.

GERMAN, per, Z fuer Elektrochemie, Vol LXIV, No 2,  
1960, pp 314-321.

GB/163

Sci Rep  
Jun 63

Eggenschwiller, Hermann and Jaenicke, Walther.  
CATALYTIC ACTIVITY OF PHOTOGRAPHICALLY  
DEVELOPED SILVER FOR THE REDUCTION OF  
SILVER COMPLEXES. [1961] 10p. 10 refs.  
Order from SLA \$1. 10 61-18671

Trans. of Zeitschrift [für] Elektrochemie (West  
Germany) 1960, v. 64, no. 3, p. 391-394.

DESCRIPTORS: \*Photographic emulsions, Processing.  
\*Silver, Catalysis, \*Silver compounds, Complex com-  
pounds, Reduction, Oxidation, Diffusion.

Photographic emulsions were developed for different  
lengths of time and then fixed. Silver was liberated  
from soluble citrate complexes on the silver threads  
formed by a second development. The reduction speed  
observed for layers developed only for a short time  
(small nuclei) passes through a sharp maximum. This  
(Materials--Photographic, TT, v. 6, no. 10) (over)

61-18671

I. Eggenschwiller, H.  
II. Jaenicke, W.

1875

Office of Technical Services



Arnold, K. and Vetter, K. J.  
THE FLADE POTENTIAL OF PASSIVE NICKEL.  
[1962] 12p.  
Order from ATS \$16. 45      ATS-02P60G

Trans. of Z[eitschrift für] Elektrochem[ie] (West  
Germany) 1960, v. 64, no. 3, p. 407-413.

DESCRIPTORS: \*Nickel, \*Passivity, \*Electric  
potential.

62-17317

- I. Title: Flade potential
- I. Arnold, K.
- II. Vetter, K. J.
- III. ATS-02P60G
- IV. Associated Technical  
Services, Inc., East Orange,  
N. J.

ATS/980-GT

(Chemistry--Physical, TT, v. 6, no. 2)

Office of Technical Services

Electrode Reactions on Active, Passive, and  
Transpassive Chromium, by H. Weidinger, E.  
Lange, 16 pp.

GERMAN, per, Z. fuer Elektrochemie,  
Vol LXIV, No 4, 1960, pp 468-477.

ATS-16 M40

Sci  
Vol IV, No 11  
Jun 62

199, 255

62-17323

Koepp, H.-M., Wendt, H., and Strehlow, H.  
THE COMPARISON OF ELECTROMOTIVE SERIES  
IN DIFFERENT SOLVENTS, PT. 2. [1962] 13p.  
Order from ATS \$16.75      ATS-27P60G

Trans. of Z[schrift für] Elektrochem[ie] (West -  
Germany) 1960, v. 64, no. 4, p. 483-491.

DESCRIPTORS: \*Organic solvents, Electrochemistry,  
Electrodes, Electric potential.

(Chemistry--Physical, TT, v. 8, no. 2)

I. Title: Electromotive series

I. Koepp, H.-M.

II. Wendt, H.

III. Strehlow, H.

IV. ATS-27P60G

V. Associated Technical  
Services, Inc.,  
East Orange, N. J.

Office of Technical Services

The System Smooth Pt/H<sub>2</sub>O<sub>2</sub>, O<sub>2</sub>, H<sub>2</sub>O With Special  
Reference to Electrode Pretreatment, by J. Giner.  
GERMAN, per, Zeitschrift fuer Elektrochemie,  
Vol 64, 1960, pp 491-500.  
NTC-71-16251-07D

Nasa TTF 10,001 240

Jan 72

Examination of the Reaction Zone of Detonations  
in Knallgas, by T. Just.

GERMAN, per, Zeitschrift fuer Elektrochemie,

Vol 64, 1960, pp 501-513.

ntc-71-15634-19D

Feb 72

The pH-Function of the Fluorescence of  
Naphthalene Derivatives, by Th. Förster, 9 pp.  
GERMAN, per, Z. für Elektrochem., Vol LIV, 1960,  
pp 531-535.  
AEC-ANL-TY-112

Sci-Chem  
Aug 65

286,874

63-12924

Hoffmann, E. G.

MOLECULAR SPECTROSCOPY INVESTIGATIONS ON  
ORGANO-ALUMINUM COMPOUNDS. IV. ON THE  
SPECTROSCOPIC IDENTIFICATION OF THE ASSO-  
CIATION OF COMPOUNDS OF THE TYPE  $ALR_3$  AND  
 $ALR_2Cl$ . [1962] 28p.  
Order from K-H \$32.00

K-H-10486

Trans. of Zeitschrift für Elektrochemie (West  
Germany) 1960, v. 64, no. 5, p. 616-631.

DESCRIPTORS: \*Molecular spectroscopy, Analysis,  
\*Metalorganic compounds, Spectroscopy, \*Aluminum  
compounds, Identification.

(Chemistry--Physical, TT, v. 9, no. 10)

- I. Hoffmann, E. G.
- II. K-H-10486
- III. Title: Spectroscopic ...
- IV. Kresge-Hooker Science  
Library Associates,  
Detroit, Mich.

Office of Technical Services

Infrared Investigations of Isotopic Nitrogen Compounds, Part I. The Location of the Valence Frequency of the -N-N Double Bond, by R. Kubler, W. Luttke, et al, 17 pp.

GERMAN, per, Z. fuer Elektrochemie, Vol. LXIV, 1960, p 650. 9066981

AEC Tr-5283

Sci - Phys  
Oct 62

215,534



Excess Potential and Kinetics of  $Tl^{3+}/Tl^{+}$   
Oxidation-Reduction Electrode, by K. J.  
Vetter, G. Thiemke, 17pp.  
GERMAN, per, Zeitschrift fur Elektrochemie,  
Vol 64, No 6, 1960, pp 805-812.  
CFSTI TT-64-18554.

322,583

Sci - Chemistry  
Mar 67

On the Photochemistry of Substitution and  
Isomerisation Reactions of Complex Ions of  
Trivalent Chromium, by H. F. Schlafer.

GERMAN, per, Zeit fur Elektrochemie, Vol LXIV,  
No 7, 1960, pp 887-890.

Univ of Melbourne  
Language Section  
Faculty of Science  
T.314

171, 623

Sci - Phys  
Oct 61

Wilk, M.  
SEMICONDUCTOR PROPERTIES OF AROMATIC  
HYDROCARBONS. [1960] 11p.  
Order from ATS \$14.60

ATS-23N480

Trans. of Z[schrift. für] Elektrochemie (West  
Germany) 1960, v. 64, no. 7, p. 930-936.

151575

(Physics--Solid State, TT, v. 5, no. 8)

61-12800

1. Hydrocarbons--Electrical  
properties
2. Semiconductors--Materials
- I. Wilk, M.
- II. ATS-23N480
- III. Associated Technical  
Services, Inc.,  
East Orange, N. J.

CSIRO/NO 5631  
ATS/755-45

Office of Technical Services

Selectivity and Typical Reaction Mechanisms in  
Radiation Chemistry, by G. O. Schenck, 72 pp.

GERMAN, per, Z fuer Elektrochemie, Vol LXIV,  
1960, pp 997-1011. 9080-55

AKRE, Harwell

NP Tr-683

SLA TT-64-10367(711)

Sci - Nuc Phys  
Sep 61

166, 195

Reactions of Cyclohexane and Other Hydrocarbons  
Under the Influence of  $^{60}\text{Co}$  - - Radiation, by  
D. Hummel, H. Barzynski, 16 pp.

GERMAN, per, Z für Elektrochemie, Vol LXIV,  
Nov 1960, pp 1015-1019. 7080645

AERE, Harwell  
NP Tr-679

Sci - Nuc Phys  
Sep 61

166,193

Fission Product Diffusion and Self Diffusion  
in High Temperature Nuclear Fuels,  
by R. Lindner, H. Matske, ~~XX~~ et al, 11 pp.

NGERMAN, per, Z. elektrochem, Vol LXIV,  
1960, pp 1042-1045.

ABC-Tr-5206

CEA TR-A-1172 Rev TN  
210, 923

Sci - Fuels,  
Nuc Phys  
S p 62

Neutron Activation Analysis in Strong Neutron  
Absorbers, by F. Baumgartner, 17 pp.

GERMAN, per, Zeitschrift fur Elektrochemie,  
Vol LXIV, No 8/9, 1960, pp 1077-1080. 9215969

ACSIL Tr 1427

Sci - Chem  
Jun 64

248,806

Neutron Activation, by W. Schulze, 7 pp.

GERMAN, per, Zeitschrift fur Elektrochemie,  
Vol LXIV, No 8/9, 1960, pp 1083-1086. 9215987

ACSIL Tr 1428

Sci - Chem  
Jan 64

248,805



Counting of Radioisotopes of Metallic Elements in  
Liquid Scintillators, by Gerhard Erdmann, Gunter  
Herrmann, 14 pp.

GERMAN, per, Z Elektrochem, Vol LXIV, 1960,  
p 1092.

AEC T-4444

Sci - Phys  
May 61

150,320

TT-64-14009

L. Ohse, R. W.

Ohse, R. W.  
AN OSCILLOGRAPHIC INVESTIGATION OF THE  
ELECTRODE REACTIONS IN THE SYSTEM  
Cd/AQUEOUS SOLUTION WITH THE INTERMIT-  
TENTLY GALVANOSTATIC MEASURING METHOD.  
[Mar 63] 32p 29refs

Order from SLA \$3.60

TT-64-14009

Trans. of Zeitschr[ift] für Elektrochemie (West  
Germany) 1960, v. 64, no. 10, p. 1171-1179.

(Chemistry--Physical, TT, v. 11, no. 12)

Office of Technical Services

Infrared Spectroscopic Study of Isotopic  
Nitrogen Compounds, Part II. The Vibrational  
Spectrum of Benzamide, by S. Weckherlin,  
W. Luttke, 14 pp.

GERMAN, per, Z. Elektrochemie, Vol LXIV,  
1960, pp 1228-1234. 9067005

ABC Tr-5277

Sci - Chem  
Oct 62

218,531

The Problem of Excess Oxygen in Nickel Oxide,  
by Hartmut Gossel, 14 pp.  
GERMAN, per, Z fuer Elektrochemie, Vol LXV, 1961,  
pp 98-102. 9226026  
AEC-UCRL-Tr-1074 (L)

Sci-Chem  
Dec 64

270,142

Stability and Spread of Flames, by H. G. Wagner.

GERMAN, per, Z. <sup>phys</sup> Elektrochemie, Vol LXV, No 3,  
1961, pp 290-295.

OF 7322  
SSE 4767

Sci - Chem

Aug 63

54 3,665

The Mechanism of Chemisorption of Gases on  
Oxides, by Karl Hauffe, 19 pp.

GERMAN, per, Z. Elektrochem, Vol LXV, 1961.  
pp 321-327.

Sci - Chem

Sep 62

AEC UCRL-Tr 831(L)  
CEA A-1157  
Rev TN  
212, 661

Measurements in the Reaction Zone of  
Hydrocarbon-Oxygen Detonations, by T. Just  
GERMAN, per, Zeitschrift fuer Elektrochemie,  
Vol 65, 1961, pp 411-416  
NTC 71-15274-07D

mar 72

TT-64-12080

Jänicke, W[alter] and Lorenz, B.  
HALFTONE PROCESSES AND THE CHARACTERISTIC  
CURVE IN ELECTROPHOTOGRAPHY. [1963] 21p  
Order from ATS \$22.50      ATS-65Q72G

Trans. of Zeitschrift für Elektrochem[ie] (West  
Germany) 1961, v. 65, no. 6, p. 493-503.

DESCRIPTORS: \*Electrophotography, Photographic  
processors.

- I. Jänicke, W.
- II. Lorenz, B.
- III. ATS-65Q72G
- IV. Associated Technical  
Services, Inc.,  
East Orange, N. J.

(Materials--Photographic, TT, v. 11, no. 4)

Office of Technical Services



63-16404

Beck, F. and Gerischer, H.  
ELECTROCHEMICAL VIEWPOINTS CONCERNING  
CATALYTIC HYDROGENATION AT PLATINUM CON-  
TACTS IN BUFFERED SOLUTIONS. 25 Feb 63 [39]p.  
33 refs.

Order from SLA \$3.60

63-16404

Trans. of Z[schrift] für Elektrochemie (West  
Germany) 1961, v. 65, p. 504-517.

DESCRIPTORS: Electrochemistry, \*Cyclohexanes,  
\*Styrenes, Allyl radicals, Butenyl radicals, \*Alcohols,  
Methyl radicals, Vinyl radicals, \*Carbinols, Ethyl  
radicals, \*Acetates, \*Acrylic acid esters, Ethers,  
\*Acetones, Mesityl radicals, Oxides, Phenyl radicals,  
\*Acetylenes, \*Nitrobenzenes, \*Hydrogenation, \*Plati-  
num electrodes, Catalysts, Polarization, Ions, Chlo-  
rides, Hydrogen ion concentration, Buffers, Reaction  
kinetics.

(Chemistry--Physical, TT, v. 10, no. 7)

(over)

I. Beck, F.  
II. Gerischer, H.

Office of Technical Services

Theory of Ageing of Precipitates by Re-Solution,  
by G. Wagner,  
GERMAN, per. Z. Elektrochemie, Vol 65, No 7/8,  
1961, pp 581-591.  
BISI 8845

Jun 71

The Hindered Energy Exchange Between Solid  
Materials and Adsorbed Gas Molecules for  
Ortho-and Para-Hydrogen, by K. Schafer, S.  
Stots.

GERMAN, per, Z. Elektrochem, Vol 65, No 7/8,  
1961, pp 623-628.

Chem Trans Sv 3063

321,753

Sci - Chemistry  
Apr 67